REMARKS

Claims 1 to 7, 11 to 15, 19 and 22-27 are pending in this re-issue application. All of these have been allowed. Claims 9 and 10 were rejected. By this amendment, Claims 9 and 10 have been canceled.

At the bottom of page 2 of the Final Action, the Examiner indicates that: Applicant is required to comply with the sequence rules by inserting the sequence identification numbers of all of the sequences recited within the claims and/or specification. It is particularly noted hat applicants do not provide specific SEQ ID NO to the sequences depicted in the drawings either on the drawings or in the figure description.

Applicants hereby submit Revised Drawings (Figures). The Figures have been amended as suggested by the Examiner. In particular, "SEQ ID NO: 10:" has been inserted at the end of FIG. 1B and "SEQ ID NO: 11" has been inserted at the end of FIG. 2B. Support for these amendments is found in several places in the specification. In particular, applicants direct the Examiner's attention to column 3 of the patent specification, at approximately lines 28 to 34, which provides a cross reference between the figures and the sequence ID's..

In reviewing the Figures, applicants also noted that in FIG. 1A, the number "90" appears under the 89th amino acid (rather than the 90th). This has also been corrected. Applicants respectfully aver that the figures are the same as the previous figures in all other respects.

Annotated sheets showing changes are included at the end of this Amendment After Final Rejection. Proposed Formal Drawings are being submitted in a separate paper which paper cross references this Amendment After Final Rejection.

Bridging pages 3 and 4, the Examiner rejects Claim 9 and 10 as obvious. While Applicants respectfully disagree for reasons of record, Applicants have canceled Claims 9 and 10 in order to advance the prosecution of this application.

Having addressed all of the outstanding objections and rejections, applicants

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respectfully submit that the application is now in condition for allowance and passage thereto is earnestly requested. The Examiner is invited to contact the attorney at the telephone number provided below, if such would advance the prosecution of this case.

Respectfully submitted,

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Annotated Sheets Showing Changes

FIG. 1A

Met Leu Ala Arg Ala Leu Leu Cys Ala Val Leu Ala Leu Ser His Thr Ala Asn Pro Cys Cys Ser His Pro Cys Gln Asn Arg Gly Val Cys 20 25 Met Ser Val Gly Phe Asp Gln Tyr Lys Cys Asp Cys Thr Arg Thr Gly 35 Phe Tyr Gly Glu Asn Cys Ser Thr Pro Glu Phe Leu Thr Arg Ile Lys 55 Leu Phe Leu Lys Pro Thr Pro Asn Thr Val His Tyr Ile Leu Thr His 75 Phe Lys Gly Phe Trp Asn Val Val Asn Asn Ile Pro Phe Leu Arg Asn 90 85 90 Ala Ile Met Ser Tyr Val Leu Thr Ser Arg Ser His Leu Ile Asp Ser Pro Pro Thr Tyr Asn Ala Asp Tyr Gly Tyr Lys Ser Trp Glu Ala Phe 120 Ser Asn Leu Ser Tyr Tyr Thr Arg Ala Leu Pro Pro Val Pro Asp Asp 135 Cys Pro Thr Pro Leu Gly Val Lys Gly Lys Lys Gln Leu Pro Asp Ser 150 Asn Glu Ile Val Glu Lys Leu Leu Arg Arg Lys Phe Ile Pro Asp 170 Pro Gln Gly Ser Asn Met Met Phe Ala Phe Phe Ala Gln His Phe Thr 180 185 His Gln Phe Phe Lys Thr Asp His Lys Arg Gly Pro Ala Phe Thr Asn 200 Gly Leu Gly His Gly Val Asp Leu Asn His Ile Tyr Gly Glu Thr Leu 215 Ala Arg Gln Arg Lys Leu Arg Leu Phe Lys Asp Gly Lys Met Lys Tyr 225 230 Gln Ile Ile Asp Gly Glu Met Tyr Pro Pro Thr Val Lys Asp Thr Gln 245 250 Ala Glu Met Ile Tyr Pro Pro Gln Val Pro Glu His Leu Arg Phe Ala 270 Val Gly Gln Glu Val Phe Gly Leu Val Pro Gly Leu Met Met Tyr Ala 275 Thr Ile Trp Leu Arg Glu His Asn Arg Val Cys Asp Val Leu Lys Gln 295 300

<u>FIG. 1B</u>

Glu 305	His	Pro	Glu	Trp	Gly 310	Asp	Glu	Gln	Leu	Phe 315	Gln	Thr	Ser	Arg	Leu 320
Ile	Leu	Ile	Gly	Glu 325	Thr	Ile	Lys	Ile	Val 330	Ile	Glu	Asp	Tyr	Val 335	Gln
His	Leu	Ser	Gly 340	Tyr	His	Phe	Lys	Leu 345	Lys	Phe	Asp	Pro	Glu 350	Leu	Leu
Phe	Asn	Lys 355	Gln	Phe	Gln	Tyr	Gln 360	Asn	Arg	Ile	Ala	Ala 365	Glu	Phe	Asn
Thr	Leu 370	Tyr	His	Trp	His	Pro 375	Leu	Leu	Pro	Asp	Thr 380	Phe	Gln	Ile	His
Asp 385	Gln	Lys	Tyr	Asn	Tyr 390	Gln	Gln	Phe	Ile	Tyr 395	Asn	Asn	Ser	Ile	Leu 400
Leu	Glu	His	Gly	Ile 405	Thr	Gln	Phe	Val	Glu 410	Ser	Phe	Thr	Arg	Gln 415	Ile
Ala	Gly	Arg	Val 420	Ala	Gly	Gly	Arg	Asn 425	Val	Pro	Pro	Ala	Val 430	Gln	Lys
Val	Ser	Gln 435	Ala	Ser	Ile	Asp	Gln 440	Ser	Arg	Gln	Met	Lys 445	Tyr	Gln	Ser
Phe	Asn 450	Glu	Tyr	Arg	Lys	Arg 455	Phe	Met	Leu	Lys	Pro 460	Tyr	Glu	Ser	Phe
Glu 465	Glu	Leu	Thr	Gly	Glu 470	Lys	Glu	Met	Ser	Ala 475	Glu	Leu	Glu	Ala	Leu 480
Tyr	Gly	Asp	Ile	Asp 485	Ala	Val	Glu	Leu	Туг 490	Pro	Ala	Leu	Leu	Val 495	Glu
Lys	Pro	Arg	Pro 500	Asp	Ala	Ile	Phe	Gly 505	Glu	Thr	Met	Val	Glu 510	Val	Gly
Ala	Pro	Phe 515	Ser	Leu	Lys	Gly	Leu 520	Met	Gly	Asn	Val	Ile 525	Сув	Ser	Pro
Ala	Tyr 530	Trp	Lys	Pro	Ser	Thr 535	Phe	Gly	Gly	Glu	Val 540	Gly	Phe	Gln	Ile
Ile 545	Asn	Thr	Ala	Ser	Ile 550	Gln	Ser	Leu	Ile	Суs 555	Asn	Asn	Val	Lys	Gly 560
Сув	Pro	Phe	Thr	Ser 565	Phe	Ser	Val	Pro	Asp 570	Pro	Glu	Leu	Ile	Lys 575	Thr
Val	Thr	Ile	Asn 580	Ala	Ser	Ser	Ser	Arg 585	Ser	Gly	Leu	Asp	Asp 590	Ile	Asn
Pro	Thr	Val 595	Leu	Leu	Lys	Glu	Arg 600	Ser	Thr	Glu	Leu	(SE	Q ID	NO:	10)

FIG. 2A

GTCCAGGAAC	TCCTCAGCAG	CGCCTCCTTC	AGCTCCACAG	CCAGACGCCC	TCAGACAGCA	60
AAGCCTACCC	CCGCGCCGCG	CCCTGCCCGC	CGCTGCGATG	CTCGCCCGCG	CCCTGCTGCT	120
GTGCGCGGTC	CTGGCGCTCA	GCCATACAGC	AAATCCTTGC	TGTTCCCACC	CATGTCAAAA	180
CCGAGGTGTA	TGTATGAGTG	TGGGATTTGA	CCAGTATAAG	TGCGATTGTA	CCCGGACAGG	240
ATTCTATGGA	GAAAACTGCT	CAACACCGGA	ATTTTTGACA	AGAATAAAAT	TATTTCTGAA	300
ACCCACTCCA	AACACAGTGC	ACTACATACT	TACCCACTTC	AAGGGATTTT	GGAACGTTGT	360
GAATAACATT	CCCTTCCTTC	GAAATGCAAT	TATGAGTTAT	GTGTTGACAT	CCAGATCACA	420
TTTGATTGAC	AGTCCACCAA	CTTACAATGC	TGACTATGGC	TACAAAAGCT	GGGAAGCCTT	480
CTCTAACCTC	TCCTATTATA	CTAGAGCCCT	TCCTCCTGTG	CCTGATGATT	GCCCGACTCC	540
CTTGGGTGTC	AAAGGTAAAA	AGCAGCTTCC	TGATTCAAAT	GAGATTGTGG	AAAAATTGCT	600
TCTAAGAAGA	AAGTTCATCC	CTGATCCCCA	GGGCTCAAAC	ATGATGTTTG	CATTCTTTGC	660
CCAGCACTTC	ACGCACCAGT	TTTTCAAGAC	AGATCATAAG	CGAGGGCCAG	CTTTCACCAA	720
CGGGCTGGGC	CATGGGGTGG	ACTTAAATCA	TATTTACGGT	GAAACTCTGG	CTAGACAGCG	780
TAAACTGCGC	CTTTTCAAGG	ATGGAAAAAT	GAAATATCAG	ATAATTGATG	GAGAGATGTA	840
TCCTCCCACA	GTCAAAGATA	CTCAGGCAGA	GATGATCTAC	CCTCCTCAAG	TCCCTGAGCA	900
TCTACGGTTT	GCTGTGGGGC	AGGAGGTCTT	TGGTCTGGTG	CCTGGTCTGA	TGATGTATGC	960
CACAATCTGG	CTGCGGGAAC	ACAACAGAGT	ATGTGATGTG	CTTAAACAGG	AGCATCCTGA	1020
ATGGGGTGAT	GAGCAGTTGT	TCCAGACAAG	CAGGCTAATA	CTGATAGGAG	AGACTATTAA	1080
GATTGTGATT	GAAGATTATG	TGCAACACTT	GAGTGGCTAT	CACTTCAAAC	TGAAATTTGA	1140
CCCAGAACTA	CTTTTCAACA	AACAATTCCA	GTACCAAAAT	CGTATTGCTG	CTGAATTTAA	1200
CACCCTCTAT	CACTGGCATC	CCCTTCTGCC	TGACACCTTT	CAAATTCATG	ACCAGAAATA	1260
CAACTATCAA	CAGTTTATCT	ACAACAACTC	TATATTGCTG	GAACATGGAA	TTACCCAGTT	1320
TGTTGAATCA	TTCACCAGGC	AAATTGCTGG	CAGGGTTGCT	GGTGGTAGGA	ATGTTCCACC	1380
CGCAGTACAG	AAAGTATCAC	AGGCTTCCAT	TGACCAGAGC	AGGCAGATGA	AATACCAGTC	1440
TTTTAATGAG	TACCGCAAAC	GCTTTATGCT	GAAGCCCTAT	GAATCATTTG	AAGAACTTAC	1500
AGGAGAAAAG	GAAATGTCTG	CAGAGTTGGA	AGCACTCTAT	GGTGACATCG	ATGCTGTGGA	1560
GCTGTATCCT	GCCCTTCTGG	TAGAAAAGCC	TCGGCCAGAT	GCCATCTTTG	GTGAAACCAT	1620
GGTAGAAGTT	GGAGCACCAT	TCTCCTTGAA	AGGACTTATG	GGTAATGTTA	TATGTTCTCC	1680
TGCCTACTGG	AAGCCAAGCA	CTTTTGGTGG	AGAAGTGGGT	TTTCAAATCA	TCAACACTGC	1740

Annotated Sheets Showing Changes

FIG. 2B

CTCAATTCAG	TCTCTCATCT	GCAATAACGT	GAAGGCTGT	CCCTTTACTT	CATTCAGTGT	1800
TCCAGATCCA	GAGCTCATTA	AAACAGTCAC	CATCAATGCA	AGTTCTTCCC	GCTCCGGACT	1860
AGATGATATC	AATCCCACAG	ТАСТАСТААА	AGAACGGTCG	ACTGAACTGT	AGAAGTCTAA	1920
TGATCATATT	TATTTATTTA	TATGAACCAT	GTCTATTAAT	TTAATTATTT	AATAATATTT	1980
АТАТТАААСТ	CCTTATGTTA	CTTAACATCT	TCTGTAACAG	AAGTCAGTAC	TCCTGTTGCG	2040
GAGAAAGGAG	TCATACTTGT	GAAGACTTTT	ATGTCACTAC	TCTAAAGATT	TTGCTGTTGC	2100
TGTTAAGTTT	GGAAAACAGT	TTTTATTCTG	ТТТТАТАААС	CAGAGAGAAA	TGAGTTTTGA	2160
CGTCTTTTTA	CTTGAATTTC	AACTTATATT	ATAAGGACGA	AAGTAAAGAT	GTTTGAATAC	2220
ттааасаста	TCACAAGATG	CCAAAATGCT	GAAAGTTTTT	ACACTGTCGA	TGTTTCCAAT	2280
GCATCTTCCA	TGATGCATTA	GAAGTAACTA	ATGTTTGAAA	TTTTAAAGTA	CTTTTGGGTA	2340
TTTTTCTGTC	ATCAAACAAA	ACAGGTATCA	GTGCATTATT	AAATGAATAT	TTAAATTAGA	2400
CATTACCAGT	AATTTCATGT	CTACTTTTTA	AAATCAGCAA	TGAAACAATA	ATTTGAAATT	2460
TCTAAATTCA	TAGGGTAGAA	TCACCTGTAA	AAGCTTGTTT	GATTTCTTAA	AGTTATTAAA	2520
CTTGTACATA	TACCAAAAAG	AAGCTGTCTT	GGATTTAAAT	CTGTAAAATC	AGATGAAATT	2580
TTACTACAAT	TGCTTGTTAA	AATATTTTAT	AAGTGATGTT	CCTTTTTCAC	CAAGAGTATA	2640
AACCTTTTTA	GTGTGACTGT	TAAAACTTCC	TTTTAAATCA	AAATGCCAAA	TTTATTAAGG	2700
TGGTGGAGCC	ACTGCAGTGT	TATCTCAAAA	TAAGAATATC	CTGTTGAGAT	ATTCCAGAAT	2760
CTGTTTATAT	GGCTGGTAAC	ATGTAAAAAC	CCCATAACCC	CGCCAAAAGG	GGTCCTACCC	2820
TTGAACATAA	AGCAATAACC	AAAGGAGAAA	AGCCCAAATT	ATTGGTTCCA	AATTTAGGGT	2880
TTAAACTTTT	TGAAGCAAAC	TTTTTTTTAG	CCTTGTGCAC	TGCAGACCTG	GTACTCAGAT	2940
TTTGCTATGA	GGTTAATGAA	GTACCAAGCT	GTGCTTGAAT	AACGATATGT	TTTCTCAGAT	3000
TTTCTGTTGT	ACAGTTTAAT	TTAGCAGTCC	ATATCACATT	GCAAAAGTAG	CAATGACCTC	3060
ATAAAATACC	TCTTCAAAAT	GCTTAAATTC	ATTTCACACA	TTAATTTTAT	CTCAGTCTTG	3120
AAGCCAATTC	AGTAGGTGCA	TTGGAATCAA	GCCTGGCTAC	CTGCATGCTG	TTCCTTTTCT	3180
TTTCTTCTTT	TAGCCATTTT	GCTAAGAGAC	ACAGTCTTCT	CAAACACTTC	GTTTCTCCTA	3240
TTTTGTTTTA	CTAGTTTTAA	GATCAGAGTT	CACTTTCTTT	GGACTCTGCC	TATATTTTCT	3300
TACCTGAACT	TTTGCAAGTT	TTCAGGTAAA	CCTCAGCTCA	GGACTGCTAT	TTAGCTCCTC	3360
TTAAGAAGAT	таааааааа	AAAAAAG (SI	EQ ID NO: 1	<u>l)</u>		3387